

Funding the Water Programs

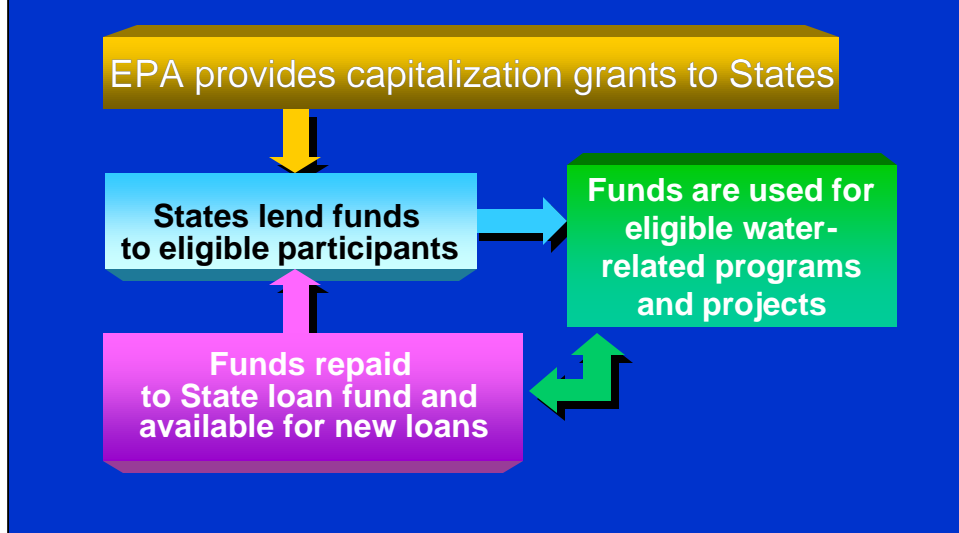


Three Types of Grants

- Revolving funds: CWSRF and DWSRF
- Program grants
 - CWA water pollution control program grants (§106)
 - CWA nonpoint source grants (§319)
 - SDWA public water system supervision program (§1443)
 - SDWA underground injection control (§1429)
- Other grants
 - Program- or project-specific initiatives
 - Geographic initiatives

- The Clean Water Act and Safe Drinking Water Acts contain three types of grant programs that we will discuss.
 - **Revolving funds** provide States with capitalization funds to be used for infrastructure improvements and other specified purposes.
 - **Program grants** (sometimes called categorical grants) support States in administering and implementing national water programs.
 - **Other grants** provide funds to the States or other organizations for project-specific initiatives, geographic initiatives, or other more limited programs.

Revolving Funds



- In 1987, Congress voted to phase out the old construction grants program for funding municipal sewer and treatment plant upgrades, replacing it with a ***Clean Water State Revolving Fund (CWSRF)***.
- A major concern addressed in the 1996 SDWA Amendments was the lack of State funds for infrastructure improvements. The Act authorized a ***Drinking Water State Revolving Fund (DWSRF)*** program (designed much like the CWSRF) to help public water systems finance the costs of drinking water infrastructure needs.
- Publicly and privately owned community water systems and nonprofit noncommunity water systems can receive DWSRF funding. Under the CWSRF, most recipients have been municipalities, although nonprofit organizations and businesses are also eligible.
- Under both programs, the goal is for States to establish independent and permanent sources of low-cost financing for eligible water-related programs and projects. EPA provides capitalization grants to States (which are allotted by formula), which they must match by at least 20 percent.
- Each program also provides funding for other activities which will be discussed later.

SRF Financing Tools

- Provide low interest loans
- Buy or refinance local debt
- Guarantee SRF debt obligations
- Purchase insurance or guarantee local debt
- Leverage program assets
- Guarantee loans of “sub-state revolving funds”
- Provide assistance to disadvantaged communities



- A wide range of tools to fund infrastructure projects is available to States through the SRF programs. The most significant advantage of the SRFs is that they allow States to offer loans at below-market rates with payback periods of up to 20 years.
- States may refinance or purchase local debt to reduce a community’s cost of borrowing. They may purchase insurance or guarantee local debt to improve credit market access or reduce interest rates.
- Using program assets as security, a State can also issue bonds to “leverage” its program. Over time, leveraging can generate a significant amount of additional funding for projects.
- Many systems serving disadvantaged communities are not able to afford even the low interest rate loans made available through the SRFs and require additional assistance to complete a project. Under the DWSRF, a State may take an amount equal to 30 percent of its capitalization grant to provide additional loan subsidies (e.g., principal forgiveness, negative interest rate loans) to communities that are classified as disadvantaged based on affordability criteria developed by the State. Under the CWSRF, States may customize loan terms to meet the needs of small and disadvantaged communities.

CWSRF Interest Rates

Year	Market Rate (%)	CWSRF Interest Rate (%)
1988	7.9	1.3
1990	7.2	4.2
1992	6.7	3.8
1994	5.6	2.9
1996	5.8	3.0
1998	5.2	2.6
2000	5.8	2.6
2001	5.3	2.5

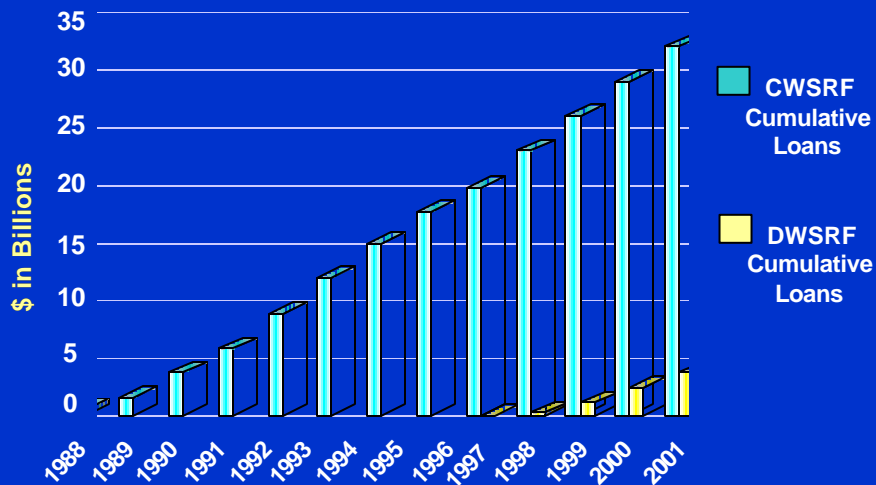
- These CWSRF interest rates illustrate how revolving funds are able to provide low-interest loans.

Grant Equivalence

		SRF Rate						
		0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%
Market Rate	5.0%	38%	31%	24%	16%	8%	0%	-9%
	6.0%	43%	36%	30%	23%	16%	8%	0%
	7.0%	47%	41%	35%	29%	22%	15%	8%
	8.0%	51%	46%	40%	34%	28%	21%	14%
	9.0%	54%	49%	44%	39%	33%	27%	20%

- This slide illustrates the “buying power” of an SRF grant. For example, when the market rate is 5 percent, a 2 percent SRF loan for a \$1 million project is equivalent to a \$240,000 grant.
- Thus, it is important not to assume that a loan is more costly than a grant. If a loan carries interest well below market rates, and the comparable grant requires a fairly substantial cash match, then funding a project with a loan may actually cost less over the long run.

Comparison of SRF Loans Made



- The 51 Clean Water State Revolving Fund programs currently issue approximately \$3 billion in loans annually. Per State allocations ranged from \$7 million to \$150 million in FY 2001. The CWSRFs have in excess of \$34 billion in assets and have issued more than \$20 billion in loans since 1988.
- Through FY 2001, the DWSRF has provided more than \$3.7 billion in loans. In FY 2001, EPA issued more than \$900 million to the States in capitalization grants.

States' SRF Obligations

- Protect the capital (principal) in the fund over the long run
- Develop annual Intended Use Plans, laying out priority projects for loans
- Provide for public involvement in the development of IUPs
- Provide a match



- States must annually prepare *intended use plans* (IUP) as part of their SRF capitalization grant applications. IUPs identify eligible projects and their priorities.
- Public involvement in developing the IUP is required.
- CWSRF programs must also create a NEPA-like process, whereby the environmental impacts of projects getting loans are analyzed and options are considered.
- States must also provide a 20 percent match.

SRF Transfers

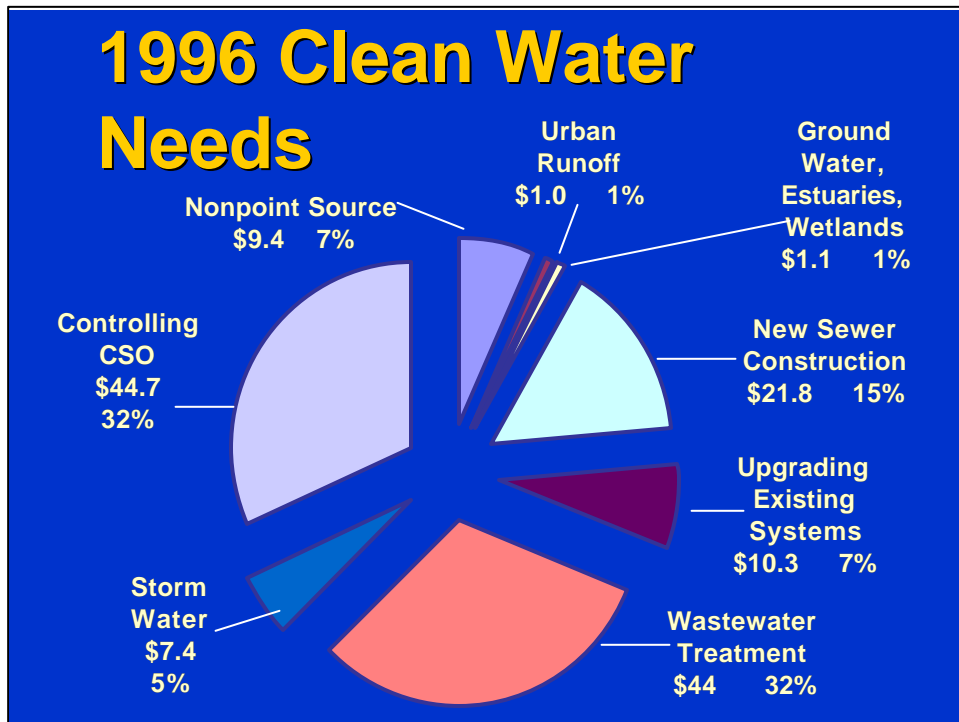
- In some States, shared responsibility for administering the two SRFs
- Can leverage funds to increase amounts available
- High credit rating ensures lower and more affordable interest rate for borrowers
- States can “cross-collateralize” the two SRFs
- Transfers allowed between SRFs
- Eight States transferred \$147 M from CW to DWSRF

- Congress recognized that in some States the responsibilities for administering the two SRF programs would be shared. For example, in New York the New York State Environmental Facilities Corporation handles the financial portion of both funds. This has allowed NYSEFC to leverage the Federal DWSRF capitalization grants to more than triple the amount of assistance than otherwise would have been provided.
- For States that leverage, a high credit rating from the financial community ensures a lower and more affordable interest rate for borrowers. In order to allow States to capitalize on the strength of either SRF program, Congress included language in EPA’s 1999 Appropriations Act allowing States to “cross-collateralize” the two SRFs to increase the security of bond issuances. That is, State bond issues can be used to support the other program with the proviso that revenues from the bonds be allocated to the respective funds in the same portion as they were used for security for the bonds.
- The most important linkage is the provision in section 302 of the 1996 SDWA Amendments that allows States to transfer funds between the two SRF programs. The provision allowed a Governor to transfer an amount equal to 33 percent of the DWSRF grant to either program.
- As of June 2001, eight States had made net transfers of \$147 million from the CWSRF to the DWSRF.

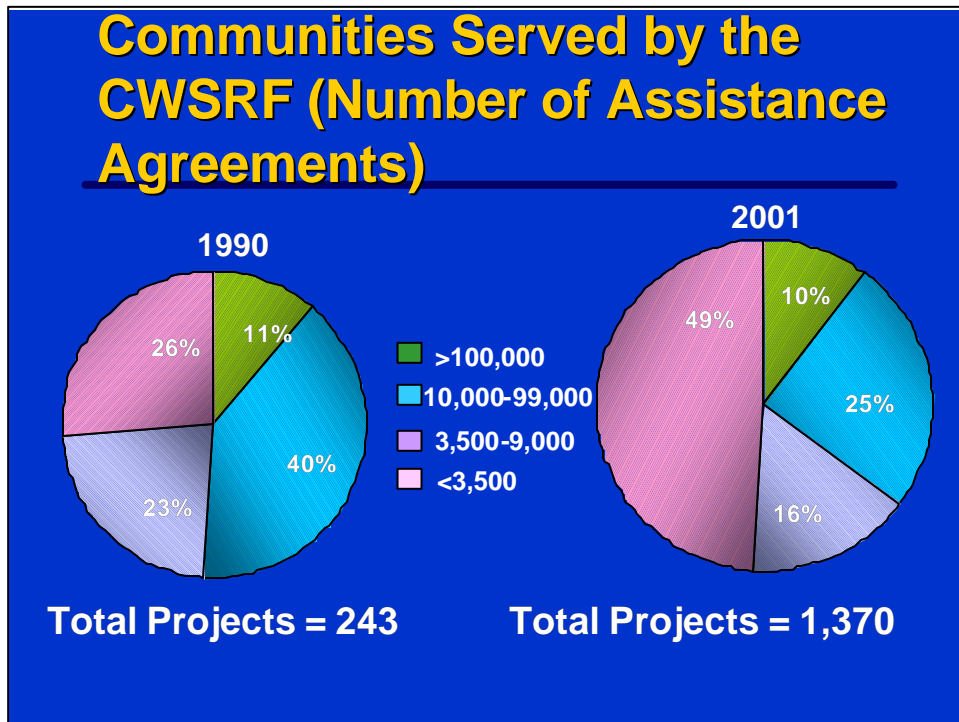
CWSRF Specifics

- Allowable projects
 - Construction, expansion, repair of municipal sewage collection and treatment systems
 - Nonpoint source control projects consistent with state or tribal §319 programs
 - Implementation of National Estuary Program plans

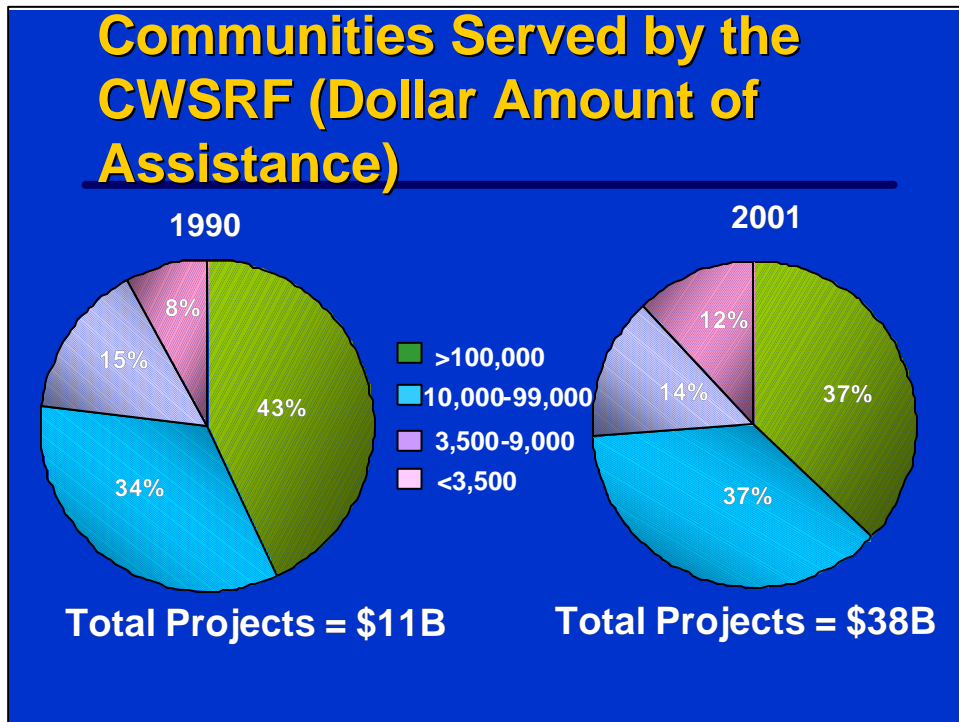
- The CWSRF is more flexible than the old construction grants program. In addition to the traditional municipal wastewater treatment projects, SRFs are also available to fund a wide variety of water quality projects including all types of nonpoint source and estuary management projects.
- At the end of the year 2000, nearly half of the CWSRFs had lent some money to nonpoint source projects. Such projects funded to date include the following loans:
 - To homeowners for repair and upgrade of septic systems;
 - To provide outreach and communication for upgrade of on-site wastewater treatment systems;
 - To land trust for purchase of sensitive lands or easements;
 - To purchase and restore degraded wetlands;
 - To developers to finance structural and nonstructural best management practices;
 - To promote smart growth by conditioning loan approval on local adoption of a smart growth plan; and
 - To purchase water rights to increase stream flows and improve water quality.



- The vast majority of funds to date have gone to traditional municipal sewage systems, but the balance is beginning to shift.
- Five percent of loan funds in FY 2000 went to nonpoint source (NPS) projects.
 - o This represents 40 percent of the total number of loans because each is relatively small.
 - o Twenty-two States had loaned to NPS projects, as of November 2000.



- The proportion of projects in small communities out of all CWSRF-funded projects has increased during the first decade of the Fund's operation.



- The proportion of total loan dollars going to various sizes of communities has stayed relatively constant.

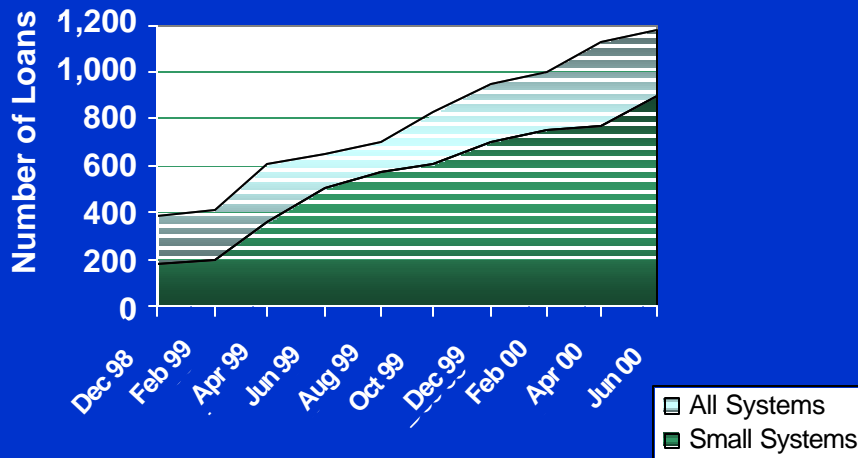
DWSRF Specifics—Eligible Project Categories

- Treatment
- Transmission and distribution
- Source
- Consolidation
- Creation of new systems

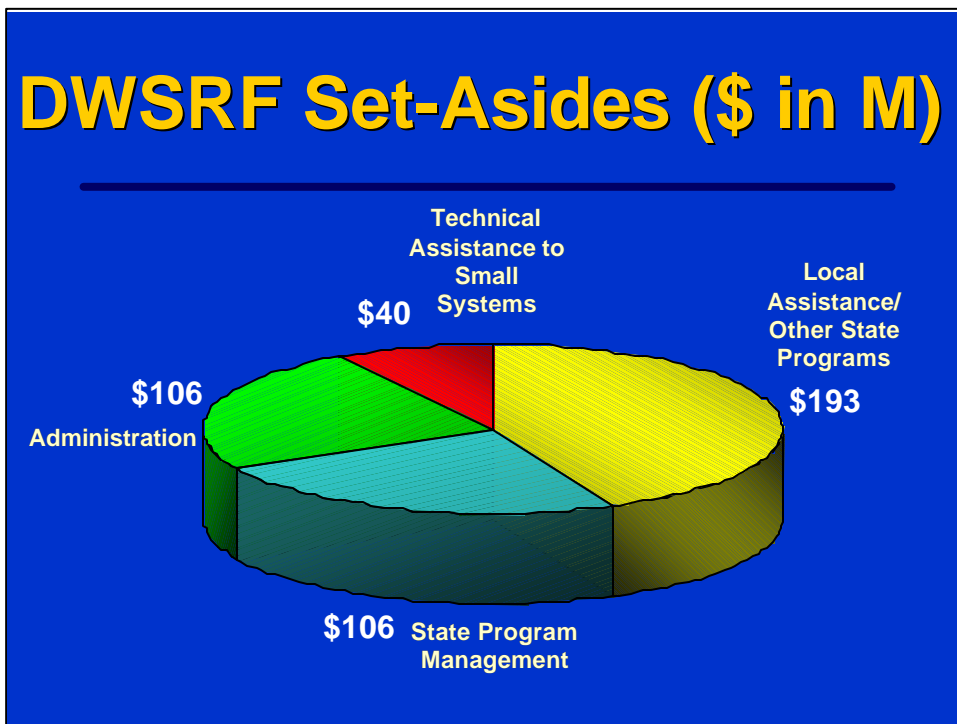


- Publicly and privately owned community water systems and nonprofit noncommunity water systems can receive DWSRF funding. To focus on the needs of small systems, Congress required that States provide a minimum of 15 percent of their funds to small systems serving 10,000 or fewer people. Most States have far exceeded this minimum requirement.
- Eligible projects are those needed to maintain compliance with health-based standards or otherwise further the public health protection goals of SDWA, such as installation and replacement or failing treatment and distribution systems. Eligible project categories include:
 - o **Treatment:** Projects to maintain compliance with regulations for contaminants that cause acute and chronic health effects.
 - o **Transmission and Distribution:** Installation or replacement of transmission and distribution mains.
 - o **Source:** Rehabilitation of wells or development of new sources to replace contaminated sources.
 - o **Storage:** Installation or improvement of eligible storage facilities.
 - o **Consolidation:** Consolidation of water supplies if a water supply has become contaminated or if a system is unable to maintain technical, financial or managerial capacity.
 - o **Creation of New Systems:** Creation of new community water systems to replace contaminated sources or to consolidate existing systems that have technical, financial or managerial difficulties.

DWSRF Loans Made



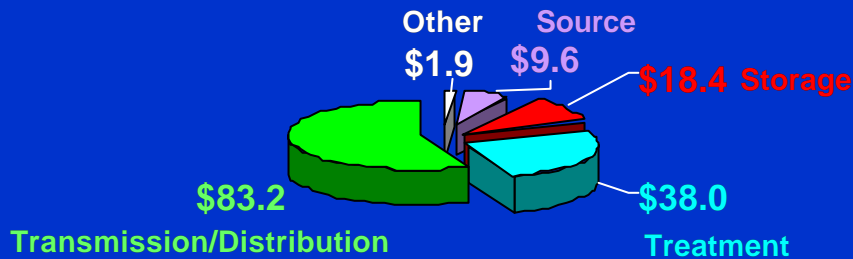
- States have loaned more than \$2.3 billion to eligible water systems for projects ranging from the installation or upgrade of treatment facilities to the creation of new water systems to address public health concerns.
- Since the first loan was made to the Town of Williamsburg, Pennsylvania, in April 1997, approximately 1,200 loans have been made. Seventy-five percent of these loans were made to small systems (40 percent of total assistance). More than 1/3 of the projects receiving loans have been completed, and communities nationwide are enjoying the benefits of a safer, more affordable supply of drinking water as a result.



- A State *may* set aside up to 31 percent of its capitalization grant for other eligible drinking water program related activities, as allowed in section 1452:
 - o Up to 4 percent of the funds may be used for administering the DWSRF and/or providing technical assistance;
 - o Up to 10 percent of a State's capitalization grant may be set aside for source water protection, capacity development, and operator certification programs, as well as for the State's overall drinking water program. An additional State match is required;
 - o Up to 15 percent (but no more than 10 percent for any one purpose) can be set aside for prevention activities, including source water protection loans, technical and financial aid for capacity development, source water assessments, and wellhead protection; and
 - o Up to 2 percent may be used for technical assistance for water systems serving fewer than 10,000 people.
- States are using set-asides to directly fund State programs. Approximately \$55 million of the \$106 million for State program management activities is being used to support PWSS programs. Approximately \$115 million of the \$193 million for local assistance activities is being used to delineate source water protection areas for public water systems and assess potential sources of contamination.

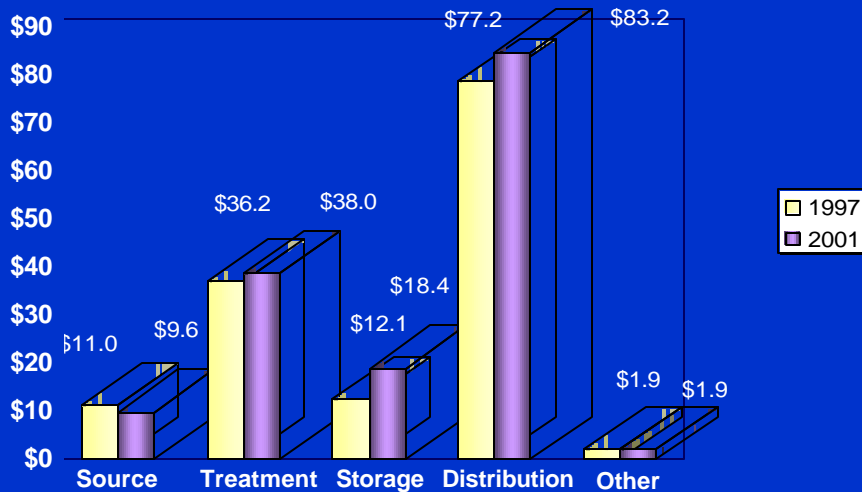
EPA and States Assess Infrastructure Needs

Total 20 Year Need of All Community Water Systems (\$Billion)



- Section 1452(h) of the 1996 SDWA Amendments stated, “The Administrator shall conduct an assessment of water systems capital improvement needs of all eligible public water systems in the United States and submit a report to the Congress containing the results of the assessment within 180 days after the date of enactment of the SDWA Amendments of 1996 and every four years thereafter.”
- EPA’s second nationwide survey of drinking water systems’ infrastructure needs estimated how much money drinking water systems nationwide will have to spend over the next 20 years.
 - o The report estimated the need for complying with current and future Federal regulations, replacing aging infrastructure to protect public health, and consolidating with or acquiring neighboring systems with safe supplies of drinking water.
 - o Approximately 4,000 water systems participated in the two-year study. Representatives from every State, the Indian Health Service, and American Indian Tribes and Alaska Native villages participated in survey design and implementation.
- The second Drinking Water Infrastructure Needs Survey Report was completed in 2001. It reported \$150.9 billion in need (in January 1999 dollars) over a 20 year period to ensure the continued provision of safe drinking water. Results from the survey are used to develop a formula to allot Drinking Water State Revolving Fund grants. The third Needs Survey is currently in the planning stage.

EPA and States Assess DW Infrastructure Needs



- The 1996 SDWA Amendments directed EPA to conduct a survey of the infrastructure needs facing public water systems every four years - with the first report published in 1997. The second survey released in 2001 estimates that drinking water systems will need to invest \$150.9 billion over a 20 year period to ensure the continued provision of safe drinking water. Results from the survey are used to develop a formula to allot Drinking Water State Revolving Fund grants.
- This slides compares the results of the 1997 and 2001 Needs Assessments.

Major Water Program Grants

- Support national water programs administered by States and Tribes
- Provide for ongoing operation and administration
- Funds generally allocated by formula; noncompetitive



- EPA provides grants to State and Tribal governments to fund ongoing operation and administration of environmental programs. These funds are generally allocated by formula, often with statutory guidance on elements to be included. Program grants are noncompetitive.
- States and Tribes must provide a cash or in-kind “match” for the Federal share of the grant. A match is a contribution from the grantee toward the total funding amount. An “in-kind” match is a non-cash contribution (e.g., the time of a State employee not funded by the grant).
- Under the Clean Water Act, EPA funds the following program grants:
 - o Section 106 water pollution control program grants; and
 - o Section 319 nonpoint source grants.
- Under the Safe Drinking Water Act, EPA funds the following program grants:
 - o Public water system supervision grants; and
 - o Underground injection control grants.

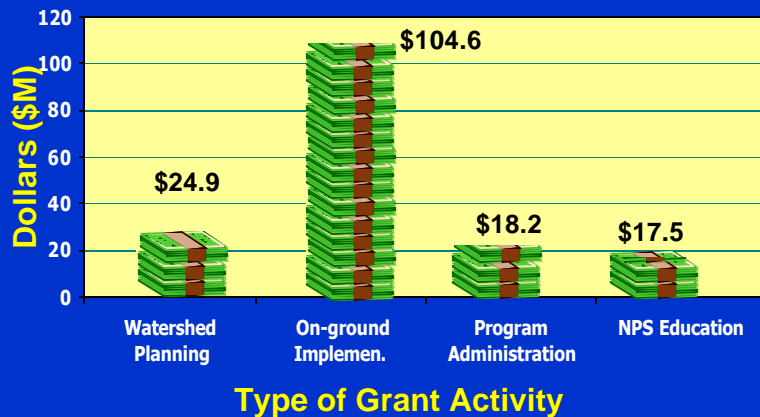
CWA §106 Water Pollution Control Program Grants

Eligible activities:

- Water quality standards
- Water quality monitoring and reporting
- NPDES permitting
- Enforcement
- TMDLs and WQ planning
- Training, public education
- Ground water programs

- Section 106 of the Clean Water Act authorizes EPA to provide Federal assistance to States (including territories, the District of Columbia, Indian Tribes) and interstate agencies to establish and implement ongoing water pollution control programs. Prevention and control measures supported by State Water Quality Management programs include permitting, pollution control activities, surveillance, monitoring, and enforcement; advice and assistance to local agencies; and training and public information.
 - o Funds cannot be used for construction, operation or maintenance of wastewater treatment plants.
- This grant program does not have a statutory formula. EPA considers six factors to allocate funds: surface water area; ground water use; water quality impairment; point sources nonpoint sources; and population of urbanized areas. A Tribal allocation formula, including Tribal water area, land area and reservation population, is used to distribute funds to the Regions who in turn determine funding to qualified Tribes based on Regional criteria.
- Increasingly, EPA and States are working together to develop *basin-wide approaches* to water quality management. The Section 106 program is helping to foster a watershed protection approach at the State level by looking at States' water quality problems holistically, and targeting the use of limited finances available for effective program management. In the near term, the program is seeking ways to streamline the grants process to ease the administrative burden on States.
- The FY 2003 budget request for this grant program is \$180,376,900.

CWA §319 Nonpoint Source Grants



- Section 319 grants for nonpoint source activities are allocated on a formula that considers population, farmland, and water quality problems. The Federal contribution has increased significantly in recent years, but the required 40 percent match has been a problem for some nonpoint control projects. (Following a demonstration of financial hardship, the match for Indian Tribes may be reduced to as low as ten percent.)
- Section 319 grants are typically used to develop and implement State nonpoint source plans and regulatory programs, develop on-the-ground controls of nonpoint sources (e.g., best management practices), and develop TMDLs that cite nonpoint sources as a key contributor to water quality impairments.
- The elimination of the old section 314 Clean Lakes Program allocation as a separate budget item means that Clean Lakes activities are now covered under §319 grants. Five percent of total funds must be used for Clean Lakes activities.
- The FY 2003 budget request is \$238,476,000. As of FY 2002, Congress has appropriated more than \$1.5 billion for states to implement their nonpoint source management programs.

SDWA §1443 Public Water System Supervision Grants

- Monitor drinking water quality
- Conduct sanitary surveys
- Enforce drinking water standards
- Provide technical assistance



- The primary source of Federal funding for the public water system supervision (PWSS) program is the PWSS grant, established under section 1443 of SDWA.
 - o This grant is allotted to States based on a formula that considers the number of different types of water systems, State population, and the State's geographical area. The FY 2003 budget contains a request of \$93,100,200 for PWSS grants.
 - o States are required to provide a 25 percent match for all Federal PWSS grant funds received. Many States provide a considerably larger amount of funding to meet program needs.
- These funds are used by State drinking water programs to implement PWSS programs, including monitoring drinking water quality, conducting sanitary surveys, enforcing drinking water standards, and providing technical assistance to local communities.

SDWA §1429 Underground Injection Control Grants

- State program management
- Data management
- Inventory of injection facilities and aquifers
- Permit review and issuance
- Technical assistance
- Surveillance and investigation
- Enforcement



- Section 1429 of SDWA authorizes grants to fund primacy States' UIC programs (\$10,950,900 is requested in the FY 2003 budget). States without primacy, where EPA administers the UIC program, do not receive this funding.
- The grant allocation formula considers State population, State land area, and injection well practices in each primacy State. States are required to provide a match of at least 25 percent; Tribes must provide at least a ten percent match.
- Typical activities include State regulation review, program plan development, data management, inventory of injection facilities, identification of aquifers, public participation, technical assistance and review, permit review and issuance, enforcement, and surveillance and investigation.

Other Water Grant Programs

- CWA wetlands program development grants
- CWA national estuary grants
- CWA water quality cooperative agreements
- SDWA grants to reimburse small system operators for training and certification costs



- Both statutes also provide for other grants. These grants are generally for more specific purposes, not ongoing operations. Eligibility is often open to other organizations instead of, or in addition to, State and Tribal governments.

CWA Wetlands Program Development Grants

- Wetland program development
 - \$15 million/year to States, tribes, local governments
 - Projects used to develop new, or enhance existing, wetland protection, management and restoration programs
 - Grant funds cannot be used to support program implementation or operation
 - Annual Grant Guidance outlines priorities and procedures and provides examples of potential grant projects

- Wetlands program development grants, initiated in FY 1990, are open to States, Tribes, local governments, interstate associations and intertribal consortia, and national nonprofit, nongovernmental organizations.
- The grants are intended to encourage wetlands program development and build the capacity of States, Tribes, local governments or associations to effectively protect wetland and riparian resources. Projects under this program may support initial development of a wetlands protection, restoration or management program, or enhancement or refinement of an existing program.
- Priorities for FY 2002 grants include:
 - Developing a comprehensive monitoring and assessment program;
 - Improving the effectiveness of compensatory mitigation; and
 - Refining the protection of vulnerable wetlands and aquatic resources.
- The FY 2003 budget request is \$14,967,000.

CWA §320 Estuary Grants

- Grants to institutions that host the National Estuary Program
 - Usually state or local government
 - Also can be universities or nonprofits
- \$17 million in FY 2002; \$19 million FY 2003 request
- Average of \$500K for each NEP
 - Up from \$300-\$350 K in previous years



- Section 320(a) of the CWA authorizes EPA to convene management conferences with participants from State legislatures, interstate or regional environmental agencies, State agencies, local governments or other public or nonprofit private agencies, research institutions and individuals to develop programs to protect and restore coastal resources in estuaries of national significance.
- The objective is to develop and implement a Comprehensive Conservation and Management Plan (CCMP) for each estuary designed by EPA. EPA has designated 28 estuaries.
- National Estuary Programs (NEPs) characterize the problems in the estuary; determine relationships between pollutant loading and impacts on living resources; develop comprehensive plans recommending solutions to priority problems; and implement actions addressing priority problems.
- The FY 2003 budget request is \$19,246,200.

Water Quality Cooperative Agreements

- Funds unique approaches to NPDES problems, with an emphasis on wet weather activities
- Eligible activities include research, demonstration projects, and training
- \$20 million to fund restoration of targeted watersheds

- Under CWA section 104(b)(3), EPA makes grants to State water pollution control agencies, interstate agencies, and other nonprofit institutions, organizations, and individuals to create unique and innovative approaches to address requirements of the NPDES program, with special emphasis on wet weather activities; i.e., storm water, combined sewer overflows, sanitary sewer overflows, and animal feeding operations. These grants have been invaluable in enabling demonstrations of unique technical, as well as managerial and funding, techniques for addressing wet weather problems.
- Among the efforts that are eligible for funding under this program are research, investigations, experiments, training, environmental technology demonstrations, surveys, and studies related to the causes, effects, extent and prevention of pollution.
- EPA's Regional Offices select grant proposals that are most likely to advance the States' and EPA's ability to deal with water pollution problems. EPA Headquarters also manages grants that address concerns of a national scope.
- The FY 2003 budget request is \$38,958,200, an increase of \$20 million. The increase is to be used for a new Targeted Watersheds Project, which will provide grants to stakeholders to implement watershed restoration activities in a limited number of pilot watersheds. Targeted watersheds will be chosen based on criteria established in consultation with stakeholders, with emphasis on the value of the resource, likelihood of positive environmental outcomes, evidence of strong governmental support, ability to leverage Agency resources, and readiness to proceed based on existing problem identification.

SDWA Operator Certification Reimbursement Grants

- States to be reimbursed for costs of training and certifying very small water system operators
- Total program cost of approximately \$134 million
- Funds not awarded will be reallocated to the DWSRF

- Section 1419(d) of SDWA requires EPA to reimburse, through grants, the costs of training and certification for persons operating community and nontransient noncommunity public water systems serving 3,300 persons or fewer. Each State is to receive an amount sufficient to cover the reasonable costs for training all such operators in the State.
- SDWA authorized an appropriation, but because Congress never appropriated the funds, EPA reserved amounts from the DWSRF appropriation. (This was allowed under the statute.) As of April 2001, EPA had reserved \$75 million from the FY 1999-2001 DWSRF appropriations. EPA intended to reserve the remaining amount to fully fund the program (estimated at an additional \$59 million) from the FY 2002 and 2003 DWSRF appropriations.
- A State has two years from the date of approval of its operator certification program to apply for and receive its initial expense reimbursement grant. Funds not allotted during this two-year period will be reallocated to States for use in the DWSRF program based on the DWSRF formula.

Other Funding Sources

- State-legislated appropriations
- Water usage fees and other fees
- Other State-specific funding



- For many States, the majority of funding for programs comes from State appropriations or State permit fees levied on drinking water systems.